

SENCITY® OMNI-SR LTE WiFi 2x2 MIMO Antenna 1399.17.0264

Description

Compact omni-directional 2x2 MIMO Cellular/WiFi Railway in-carriage antenna.
 Supports cellular 3G 900 / 2100 MHz bands.
 Supports cellular 4G 800 / 1800 / 2600 MHz bands.
 Supports 2x2 WiFi MIMO in all Wi-Fi 6E bands.
 Rugged design, meets EN 50155 railway standard.
 Fire retardant acc. to EN 45545-2 and NFPA130.
 Single hole mounting.
 Cable length 0.5m.



Product Configuration

Technical Data

Electrical Data

| | Band 1 | Band 2 | Band 3 | Band 4 |
|--------------------------|-----------|-----------|-------------|-------------|
| Frequency (MHz) | 790 - 900 | 900 - 960 | 1710 - 1750 | 1750 - 2700 |
| VSWR | 2 | 2.3 | 2.3 | 1.8 |
| Impedance (Ohm) | 50 | 50 | 50 | 50 |
| Gain (dBi) | 4 | 4 | 4 | 6 |
| Ambient temperature (°C) | 25 | 25 | 25 | 25 |
| Port Isolation (dB) | 5 | 5 | 12 | 12 |

| | Band 5 | Band 6 |
|--------------------------|-------------|-------------|
| Frequency (MHz) | 4900 - 6425 | 6425 - 7125 |
| VSWR | 1.5 | 2.2 |
| Impedance (Ohm) | 50 | 50 |
| Gain (dBi) | 6 | 6 |
| Ambient temperature (°C) | 25 | 25 |
| Port Isolation (dB) | 20 | 26 |

Ports

| | Port 1 | Port 2 |
|--------------------------|----------------|----------------|
| Port name | Cell/WiFi | Cell/WiFi |
| Connector | N, plug (male) | N, plug (male) |
| Cable Type | RADOX_RF_316_D | RADOX_RF_316_D |
| Cable Length (m) | 0.5 | 0.5 |
| Min. radius static (mm) | 5 | 5 |
| Min. radius dynamic (mm) | 30 | 30 |
| Polarization | vertical | vertical |
| DC grounded | Yes | Yes |

Connections

| | Band 1 | Band 2 | Band 3 | Band 4 | Band 5 | Band 6 |
|--------|--------|--------|--------|--------|--------|--------|
| Port 1 | X | X | X | X | X | X |
| Port 2 | X | X | X | X | X | X |

General Data

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Ground plane: Antenna works on metallic as well as on non-metallic ground plane. Indicated gain and VSRW values are valid for an antenna mounted on metallic ground plane of 0.5m diameter.

Mechanical Data

| | |
|-----------------|--------------------------------|
| Dimensions (mm) | 33.2 x 145 (Height x Diameter) |
| Weight (kg) | 0.9 |

Environmental Data

| | |
|--|---------------------------|
| Environmental conditions | indoor/outdoor |
| Operation temperature (°C) | -45 to 85 |
| Storage temperature (°C) | -45 to 85 |
| Transport temperature (°C) | -45 to 85 |
| IP rating | IP68, IP69 |
| Flammability rating | EN 45545-2 |
| Solar radiation | UL 746C, F1 |
| 2011/65/EU (RoHS - including 2015/863 and 2017/2102) | compliant |
| Lead-free soldered | yes |
| WEEE 2012/19/EU | no special marking needed |
| REACH 1907/2006/EC | compliant |

Flamability: EN 45545-2 (2013) HL3, NFPA130 (2013)

Environment: EN 50155 (2016)

Cooling EN 60068-2-1 (2007), test Ad, -55°C, 8h

Dry heat EN-60068-2-2 (2007), test Bb, +85°C, 8h

Damp heat cyclic EN 60068-2-30, +25/55°C

Temperature change EN 60068-2-14 (2008), -40/+85°C

Salt mist EN 60068-2-11 (2008), 96h

Mechanical vibration/shock/simulated lifetime: IEC 61373 (2010), § 9 and § 10, category 1B

Hammer impact test: EN 60068-2-75 (1997), IEC 62262 (2002) IK10, test Ehc

Corrosion: MIL-F-14072 E type 1 "exposed"

Material Data

| | |
|-----------------|--------------------|
| Radome colour | RAL 7044 (grey) |
| Radome material | PC (Polycarbonate) |

Related Documents

| | |
|----------------------|----------------|
| Mounting instruction | DOC-0000756790 |
| Painting instruction | DOC-0000256180 |
| Security instruction | DOC-0000278984 |
| Outline drawing | DOU-00388880 |
| 3D-model | DOC-0000890132 |